Application No.: 10/519,063

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for signal processing, wherein a sensor signal of an image sensor is provided as an input and wherein the input is reconstructed in a filter to establish an output for further processing, wherein the filter comprises a a luminance-reconstruction-filter, a red-green-blue-colorreconstruction-filter and a contour-reconstruction-filter, wherein the input comprises a plurality of pixels, and a pixel provides a color value assigned to at least one of the colors red, green or blue, and wherein the method comprises the steps of; applying the reconstruction filter to an array of pixels of predetermined array size comprising a number of pixels, wherein at least one of the number of pixels is formed by a red pixel assigned to the color of red, at least one of the number of pixels is formed by a blue-pixel assigned to the color of blue, and at least one of the number of pixels is formed by a green-pixel assigned to the color of green, weighting the red- and/or the blue-pixel by a green-parameter, and applying the contourreconstruction filter by multiplying pixels of the array by contour reconstruction filter coefficients after weighting by the green parameter and summing the multiplied pixels into one output-pixel, and wherein the method comprises centering the output-pixel in the array, and applying the contour-reconstructionfilter in parallel with application of the color colour-reconstruction filter to the pixels.

2. (Cancelled)

Application No.: 10/519,063

3. (Previously presented) The method as claimed in claim 1, also comprising

applying the luminance-reconstruction-filter by summing the pixels of the array

after weighting by the green parameter into one luminance reconstruction output-

pixel.

4. (Cancelled)

5. (currently amended) The method as claimed in of claim 14, characterized

by combining the luminance-reconstruction-filter and the low-pass-filter into one

single filter.

6. (Orignal) The method as claimed in claim 1, characterized by applying the

color-reconstruction-filter to an array-size of 3.times.3 or 5.times.5, in particular has

to array-size of 5.times.5 in case of a heavy sensor matrix.

7. (currently amended) The method as claimed in of claim 1 14, characterized

by applying subsequent to a false-color-filter a post-filter of 2.times.2 array-size, to

position a center-output-pixel of a predetermined small array of green-pixels in

phase with a white-pixel which is centered with respect to the same array as that to

which the luminance-reconstruction-filter has been applied to.

8. (Original) The method as claimed in claim 1, characterized by applying the

contour-reconstruction-filter, in parallel with the luminance-reconstruction-filter

and by adding their reconstructed signals thereafter.

- 3 -

Application No.: 10/519,063

9. (Original) The method as claimed in claim 1, characterized by applying the

contour-reconstruction-filter to an array-size, which exceeds the size of an array to

which the color-reconstruction-filter is applied to.

10. (Original) The method as claimed in claim 1, characterized by applying

the contour-reconstruction-filter to an array-size of 5.times.5, in particular to an

array-size of 4.times.4 or 6.times.6.

11. (Original) The method as claimed in claim 1, characterized by offering

various luminance-reconstruction-filters for appliance, in particular by applying a

luminance-reconstruction-filter to an array size of 2.times.2 in case of no or slight

optical low pass filtering and/or applying a respective luminance-reconstruction-

filter is applied to an increased array-size of 4.times.4 or 6.times.6 upon heavier

optical low pass filtering.

12. (Original) The method as claimed in claim 1, characterized by offering

various color-reconstruction-filters are offered for appliance, in particular by

applying a 3.times.3-color-reconstruction-filter in case of a 4.times.4-luminance-

reconstruction-filter and/or applying a 5.times.5-color-reconstruction-filter in case of

a 6.times.6-luminance-reconstruction-filter.

13. (Original) The method as claimed in claim 1, characterized by offering

various contour-reconstruction-filters for appliance, in particular by applying a

4.times.4-contour-reconstruction-filter in case of a 3.times.3-color-reconstruction-

filter or applying a 6.times.6-contour-reconstruction-filter in case of a 5.times.5-

color-reconstruction-filter.

- 4 -

Application No.: 10/519,063

14. (Original) The method as claimed in claim 1, characterized by applying a

3.times.3-color-reconstruction-filter in combination with a 5.times.5 contour-

reconstruction-filter, in particular by adding subsequently a color-reconstructed and

a contour-reconstructed signal for further processing.

15. (currently amended) An apparatus for signal processing, which is in

particular adapted to execute the method as claimed in claim 1, comprising an

image sensor for providing a sensor signal as an input and a filter for reconstructing

the input to establish an output for further processing, wherein the filter comprises

at least one reconstruction-filter selected from the group consisting of: a luminance-

reconstruction-filter, a red-green-blue-color-reconstruction-filter and a contour-

reconstruction-f-ilter filter, wherein the input comprises a plurality of pixels, and a

pixel provides a color value assigned to at least one of the colors red, green or blue,

characterized in that the reconstruction-filter is adapted to be applied to an array of

pixels of predetermined array size comprising a number of pixels, wherein at least

one of the number of pixels is formed by a red-pixel assigned to the color of red, at

least one of the number of pixels is formed by a blue-pixel assigned to the color of

blue, at least one of the number of pixels is formed by a green-pixel assigned to the

color of green and the apparatus is further comprising: a reconstruction block

adapted to: means for weightening the red- and/or the blue-pixel by a green-

parameter, means for summarizing the pixels of the array into one output pixel, and

means for centering the output pixel in the array and means for parallel processing

of the contour-reconstruction-filter and a color-reconstruction-filter.

16. (currently amended) A computer program product storable on medium

readable by a computing system, in particular a computing system of a camera,

comprising a software code section which induces the computing system to execute

Application No.: 10/519,063

the method as claimed in claim 1 when the computer program product is executed

on the computing system, in particular when executed on a the computing system of

a the camera.

17. (currently amended) A computing system and/or semiconductor device, in

particular a computing system of a camera, configured to for store and execute

executing and/or storing a computer program product, wherein the computer

program product is a computer program product storable on medium readable by a

computing system, in particular a computing system of a camera, comprising a

software code section which induces the computing system to execute the method as

claimed in claim 1 when the computer program product is executed on the

computing system, in particular when executed on the computing system of the

camera as claimed in claim 18 thereon.

18. (currently amended) A camera comprising an optical system, an-image

sensor and a computer program product storable on medium readable by a

computing system, in particular a computing system of a camera, comprising a

software code section which induces the computing system to execute the method as

claimed in claim 1 when the computer program product is executed on the

computing system, in particular when executed on a the computing system of the

camera an apparatus as claimed in claim 16.

- 6 -